

## The effect of visual art activities on socialization and stress management of individuals with special needs

Kiymet Bayer<sup>1,\*</sup>, Seda Liman Turan<sup>2</sup>

<sup>1</sup>Ünye Fehmi Cerrahoğlu Special Education Practice School 3rd Level, Ordu, Türkiye

<sup>2</sup>Trabzon University, Faculty of Education, Department of Fine Arts Education, Trabzon, Türkiye

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**Abstract:** This study aims at investigating the impact of visual arts activities on the socialization and stress management of individuals with special needs. This is a qualitative research study that employs "action research" and our data were collected based on the observations of teachers. Over a 20-week period, visual arts activities were carried out with 27 individuals with special needs, including six with autism, seven with Down syndrome, and 14 with moderate to severe intellectual disabilities, who received education at the third level in the "Fehmi Cerrahoğlu Special Education Practice School" in Ordu province during the 2020-2021 and 2021-2022 academic years. The study group included a counselling teacher and 19 special education teachers, who observed the activities and their effects on the socialization levels and stress management of educable individuals with special needs. The data obtained from semi-structured interviews were analyzed using content analysis. Most of the participating teachers agreed that visual arts activities contributed to the socialization and stress management of individuals with special needs, and the study found that these activities played an important role in the inclusion of individuals with special needs in society and led to a decrease in stress symptoms.

## 1. INTRODUCTION

Socialization is defined as the development of self-perception along with individuals' assimilation of knowledge, skills, values, and tendencies to meet the expectations of society. The relationships between individuals are regulated by the process of socialization. Through socialization, the individual attains both personality and self-identity (Şahan, 2007). Socialization is the sum of the stages that the individual goes through since the moment of birth to obtain a social role. The individual's active participation in social life, expressing oneself and integrating with society, and fulfilling the expected responsibilities enable significant progress in the process of socialization. Individuals who cannot form their personalities and be productive are not socially accepted.

One of the most important problems of individuals with special needs is the inability to communicate and express themselves. It is known that there is prejudice and some negative beliefs against them. The idea that education cannot be done with individuals with special needs and the accompanying pity, ridicule, abstinence, protective behavior... etc. attitudes cause these

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\*CONTACT: Kiymet BAYER ✉ [kymtbayer@gmail.com](mailto:kymtbayer@gmail.com) 📍 Ünye Fehmi Cerrahoğlu Special Education Practice School 3rd Level, Ordu, Türkiye

individuals to move away from the environment, low self-perception, loss of self-confidence, anxiety, and stress (Baydağ, 2013).

Social relationships also affect the emotional structure of the individuals with special needs. Polloway and Patton (1997) stated in their research that individuals with special needs have difficulty integrating with society due to individual and environmental situations and that these difficulties can be overcome with visual art activities. In their research, Keirstead and Graham (2004) achieved the desired positive goals (peer communication, collaboration, learning by having fun, being able to be integrated into other disciplines... etc.) through art. Grytting (2000), Paksoy (2003), Salderay (2008), Adan (2009), Işık (2014) emphasized that many skills were gained through visual art activities. Salderay (2008) conducted a study with 80 teachers (Visual Art (40) and Special Education (40) working in 55 special education practice schools and teaching visual arts education courses. As a result of this research, it was seen that social and independent living skills improved. Paksoy (2003), in his research, with the research population consisting of 18 students, 8 of whom with special needs at the educable level constituted the cluster and 10 of whom at the normal level constituted the comparison cluster, emphasized the necessity of Visual Arts lessons in the education and development of individuals with special needs aged 8-12. It was stated that Visual Arts activities supported the mental and emotional development of individuals with special needs. As a result of the activities, it was pointed out that individuals expressed themselves, socialized with each other and enjoyed the activities.

Together, creativity, productivity, sharing, and solidarity play an important role in an individual's connection with society. Social relationships, as for any other individual, affect the emotional structure of individuals with special needs. When individuals with special needs experience problems connecting with society, the obstacles they face in expressing themselves cause stress in the individual (Eşsizozğlu et al., 2013), which negatively affects their lives. Cüceloğlu (1994: 321) defines stress as “the effort that individuals spend beyond their physical and psychological limits due to adverse circumstances in the physical and social environment.” Stress may be caused by various factors and is widely recognized as a challenging condition that adversely affects individuals in all aspects. Symptoms related to stress can be mental, emotional, physical, or social. Stress symptoms appear physically, emotionally, mentally and socially. Physical stress symptoms are feelings of anxiety, tension, stomach discomfort, sweating, and imbalance in breathing; emotional stress symptoms are loss of trust, feeling worthless and inadequate, untimely anger attacks, harming oneself and the surroundings; mental stress symptoms are excessive daydreaming, difficulty making decisions, focusing on failure; social stress symptoms are disruption in emotional and social communication, unwillingness to work together, social avoidance and inability to collaborate. Stress management skills are essential for individuals' emotional well-being, and their lack hinders the socialization of individuals with special needs. Taş (2019) found that the anxiety and stress levels of individuals who had difficulties in conveying their feelings were higher than expected, and positive developments were observed in these individuals where socialization was provided. It was found that individuals who had the opportunity to express themselves through social activities developed confidence and a sense of belonging. Socialization and reducing stressors for individuals with special needs are essential for their inclusion in society. "When individuals participate in social activities, their self-confidence and confidence in their environment increase, they express themselves better, feel belonging to a group, and notice the problems in themselves and their environment earlier" (Taş, 2019:2). A person who socializes and can express himself/herself can also manage stress better.

Visual art activities, which are considered to have multifaceted effects, are also gateways to social relations. Salderay (2010) found that the compatibility of visual arts with social interest and adoption, approval, and appreciation of an individual's artworks by one's social

environment leads to emotional harmony in the individual. Inner harmony also positively affects external harmony, increasing one's ability to cope with stress. The individual who is validated by the work s/he has done can attain satisfaction. While the individual achieves socialization through the interaction and communication established within the activity, they also realize that they are a member of society. Individuals with special needs fulfill themselves by developing communication skills and taking responsibility.

Thanks to visual art activities, the productivity of the individual with special needs turns into interest. Through visual arts activities, adoption, appreciation, and approval of the individual in the environment cause emotional harmony in the individual. The individual who is approved by the work done can reach satisfaction. The individual, who gains the power to express himself through visual art activities, can initiate the process of communicating with his/her environment with the work he/she produces. Simple art interventions create positive experiences by enabling active creation. Simple art interventions increase self-expression and proficiency by creating behavioral changes and positive bodily perception (Martin et al., 2018). In his research, Eisner (2002) talks about socializing and becoming more qualified through artistic activities. Hetland et al. (2015) stated in his book "Studio Thinking 2: The Real Benefits of Visual Arts Education, Second Edition" that talents emerge through visual arts, and as soon as individuals gain self-confidence by developing their sense of achievement, the socialization process will also be positively affected. The individual who develops communication skills realizes himself by taking responsibility. It also protects physical and mental health. Art education creates mentally healthy individuals with strong communication, especially with visual arts. A sense of duty is formed in individuals who develop manual skills (Aksu, 2011). In addition, as Salderay (2010) states that visual arts are used for therapeutic purposes, that they have a healing power on individuals and patients with special needs, and that they provide improvement in self-perception and spiritual relief. It is possible for individuals with special needs to create new products if they can manage stress. They can gain skills such as sharing with friends, working together, and self-discovery. According to Gündoğdu and Adıgüzel (2016), special needs individuals can enhance their motivation, problem-solving, and decision-making skills, while also learning empathy and improving their capacity to engage in social interactions. "Through art education, it is possible to slow down the behavior of individuals who have excessive aggressive movements and have difficulty controlling themselves" (Erbay, 1995: pp.67). It is believed that individuals with special needs can cope with stress by expressing themselves and interact harmoniously through activities such as visual arts (Taş, 2019).

Meros (1990) concluded in his research that the self-esteem of individuals with special needs and art therapy studies was an effective tool. It is possible to state that visual art activities reduce the stress and anxiety levels of individuals with special needs, which makes them feel better behaviorally. Martin et al. (2018) observed in their research that creative arts therapies and activities in the context of coping with stress significantly reduced stress in participants. In the research conducted by Scott (2017), it has been determined that being involved in artistic activity can reduce clinical and non-clinical stress levels and provide stress management.

The aim of this research is to explore how visual art activities can impact the socialization and stress management of individuals with special needs who are at an educable level. The goal is to use visual art activities in a way that is effective and appropriate for individuals with special needs. To the best of our knowledge, there is no existing research that examines the relationship between visual art activities and the socialization and stress management of individuals with special needs. This study is significant because it can serve as a guide for future academic research and increase our understanding of the importance of visual arts in helping individuals with special needs cope with stress and develop social skills.

## **1.1. Aim of the Research**

The aim of the research is to study the effect of visual art activities regularly applied to individuals with special needs at an educable level on their socialization and control of stress levels.

With this research, it is determined that individuals with special needs socialize with visual arts activities and the contribution of these activities to their stress management; It is aimed to present a sample study to the literature. Thus, we aimed to use visual art activities effectively in the education of individuals with special needs at an adequate level.

### **1.1.1. Sub-objectives of the research**

1. Do visual art activities contribute to the socialization of individuals with special needs?
2. Do visual art activities contribute to the stress management of individuals with special needs?

## **1.2. Rationale and Importance of Research**

Visual arts education for individuals with special needs is a systematic educational process in which they work by using visual art applications to achieve their learning goals. The aim of the teacher in visual arts education is to create spaces where students enjoy and learn easily. Rodriguez (1984) states that visual arts education can integrate students with each other, play an active role in acquiring basic skills and values, support these achievements and other subjects and develop students (Salderay, 2008).

Salderay (2008), Mayer (1999), Polloway and Patton (1997) found that individuals with special needs had difficulty blending into society due to limitations and environment-related situations. They also mentioned that it was possible to overcome these difficulties with visual arts education. According to Salderay (2010), visual arts education develops the socialization skills of the individuals who produce these works, from the process of creating a work to the process of exhibiting it. Visual artworks contribute to the integration of individuals with special needs into society and to the awareness of society about individuals. For this reason, the contribution of visual art activities to the socialization of individuals with special needs is important.

Individuals who need special education gain the ability to produce impressive solutions at the stage of gaining new ideas with different materials and techniques in artistic activities. Visual arts activities enable individuals with special needs to use a different way of expression to express themselves. Individuals with special needs can express their love for their families by drawing a flower or a drawing in a more original way. At the same time, visual art activities can be a communication channel in the expression of the problems they experience and in expressing themselves. In this way, it is possible for individuals with special needs who want to express themselves through visual art activities to gain creative skills.

When the literature was reviewed, there was no research on the socialization and stress management of individuals with special needs through visual art activities. This research is important in terms of being the first in its field in terms of guiding future academic studies, socialization of individuals with special needs, and determining the methods/relationships/behaviors of coping with stress.

## **2. METHOD**

### **2.1. Research Design**

This is a qualitative research study that employs "action research," one of the qualitative research methods. The research was conducted to "evaluate an application within a predetermined theoretical framework" (Şimşek & Yıldırım, 2005).

The aim of the study is to investigate the effects of regular visual art activities on the socialization levels and stress management of educable individuals with special needs. Due to

the difficulty of communication with participants with moderate to severe intellectual disabilities, teachers were enlisted to observe the participants throughout the study. The observations made by the participating teachers were collected and analyzed by the researcher using a semi-structured interview form.

## 2.2. Study Group

The study group of the research consists of a counselling teacher and 19 special education teachers who work at the Fehmi Cerrahoğlu Special Education Practice School in Ordu province in the 2020-2021 and 2021-2022 academic year and participate in the research voluntarily. Seven of the participants were male and 13 were female. All of the participants received training in special education. 16 teachers are special education graduates, 1 teacher is a graduate of psychological counseling and guidance, and 3 teachers graduated from different fields, attended the 80-hour course and are working as paid teachers in the relevant institution. The ages of the participating students ranged between 14 and 27. The disability types of students with special needs are shown in Table 1. In addition to students who cannot express themselves and have difficulty speaking, their drawing skills were parallel to their intelligence quotient.

**Table 1.** Number of individuals with special needs depending on disability types.

Grade	Number of Individuals with Special Needs Depending on Disability Types		
	Autism	Down Syndrome	Moderate-Severe Mental Disability
9 <sup>th</sup> Grade	2	-	3
10 <sup>th</sup> Grade	-	3	2
11 <sup>th</sup> Grade	2	1	6
12 <sup>th</sup> Grade	2	3	3
Total	6	7	14

## 2.3. Visual Art Activities

Visual art activities were held in a specially designated area by the visual arts teacher (researcher) outside of class hours, for a total of 27 individuals with special needs, including 6 with autism, 7 with Down syndrome, and 14 with moderate to severe intellectual disabilities, who are in grades 9 to 12. Individual Education Plans (IEPs) were prepared for each student as a result of individual assessments. Practices and activities were organized according to the prepared IEPs. The practitioner who determined the activities was the field expert teacher. The activities were planned and applied for 20 weeks, totaling 50 hours, according to the special education program in effect. These activities included pastel paint, watercolor, acrylic paint, and mixed painting techniques. Painting contents consisted of two-dimensional works such as shape painting, making original art works, mosaic work with pastel paint, watercolor printing works (leaf printing, object printing techniques, etc.), painting from the model with acrylic paint, making an imaginary painting about the selected subject, dripping and painting with mixed technique. In each event, activity selection was carried out by taking into account the individual differences of individuals with medium-to-severe special needs. Choices are left to individuals with special needs and presented to their own preferences, taking into account their own wishes in accordance with their individual characteristics. Material sharing, product evaluation, interpretation, and product sharing took place during the event. In the preparation phase for teaching, pre-teaching evaluation, environment arrangements, attention, motivation, review and initiation of activity were planned and implemented. During the activities, individuals with special needs were observed to socialize with each other and establish a communication network by sharing their work and enjoying themselves while carrying out their

artistic works. Due to the fact that individuals with moderate and severe intellectual disability could not express themselves, the data for the study were collected by special education teachers who served as observers. 20 special education teachers, who are also classroom teachers, observed visual art activities and students. The interviews conducted after the teachers' observations sought to determine the impact of these activities on pupils' socialization and stress management.

#### **2.4. Data Collection Tools**

The research employed face-to-face interviews as the data collection method. A comprehensive review of the relevant literature was conducted by the researcher and a question pool consisting of 25 questions was created. The prepared questions were reduced to 15 questions in line with the expert opinions and a semi-structured interview form was organized. There were five questions designed to measure the impact of the implemented activities on the socialization of individuals with special needs and ten questions aiming to evaluate the impact of the implemented activities on the stress management of individuals.

The interviews were conducted face-to-face in a quiet and appropriate environment at the school where the research was conducted. The interviews lasted about 10 minutes. Before the interviews, the purpose of the research and the purposes for which the findings of the research would be used were explained to the participants. It was emphasized that participation in the study was voluntary and only volunteer participants were included in the study and data were collected. In addition, in line with the permission of the participants in the study group, the interviews were audio recorded by the researcher.

The content analysis method was used in the analysis of the data. After the data were transferred to the computer environment, the opinions of all participants were analyzed and common themes were determined. These common themes were extracted for each topic and the opinions of the participants were gathered under these themes. The frequency of themes was given in the analyses and the remarkable opinions of the participants about the theme were also used to support the themes.

### **3. FINDINGS**

In this section of the study, the findings obtained from the analysis of research data using the content analysis method are presented under the headings of the effects of visual art activities on the socialization and stress management of individuals with special needs. Under these headings, the questions asked to the participants in the interview were thematized, and 20 different themes were created. These themes were then divided into codes based on the answers provided by the participants and tabulated with code frequencies.

#### **3.1. Teachers' Views on the Socialization of Individuals with Special Needs in Visual Art Activities**

The participants were asked 5 questions to determine the effects of applied visual art activities on the socialization of individuals. The findings obtained from the analysis of the data of these questions are presented below.

Question 1: "Were individuals with special needs willing to participate in the activities?"

The findings obtained from the analysis of the answers given by the participants to Question 1 are presented in [Table 2](#).

**Table 2.** Findings related to willingness to participate in the activities.

Theme	Code	Frequency
Willingness to participate in events	Yes, they were.	16
	They came to the lesson in excitement.	2
	They were willing.	1
	They were generally willing but there were some exceptions	4
	1 person with special needs was not very willing, which sometimes presented difficulties.	1
	1 person with special needs was not willing.	1

All the participants stated that individuals were willing to participate in the activities. 11 participants answered that individuals with special needs were willing to participate in the activities; some participants stated that individuals with special needs came to the events running, while others stated that they came to the events excited because it was a course they liked. Participant-10 stated that most of the individuals with special needs liked to paint, so they were very eager. However, 4 participants emphasized that although individuals with special needs were willing to participate in activities in general, there were some exceptions. Participant-6 stated that 90% of the individuals with special needs wanted to participate in the activity, Participant-8 stated that only one individual with special needs did not want to participate, while the others were very happy.

Question 2: "Did they cooperate with their peers, the audience, and the teachers during the activity?"

The findings obtained from the analysis of the answers given by the participants to Question 2 are presented in [Table 3](#).

**Table 3.** Findings related to collaboration with peers, audiences and teachers.

Theme	Code	Frequency
Collaboration with peers, audiences and teachers	Yes, they did.	20
	Cooperation level increased towards the end of the activity.	1
	Cooperation was achieved with the guidance of the teacher.	1
	Cooperation ensued when individuals with special needs became aware of the activity.	1
	The activities increased communication between individuals with special needs, and communication increased cooperation	1

All the participants stated that individuals with special needs cooperated with their peers, the audience, and the teacher. While 11 participants answered the question only as "yes" or "they did", 9 participants provided additional comments. Some of the participants emphasized that the cooperation was there, and it was very nice. Participant-16 stated that cooperation was achieved with the guidance of the teacher. On the other hand, Participant-11 stated that the level of cooperation increased towards the end of the activity. Finally, Participant-17 reported that individuals with special needs became more accustomed to the activity and engaged in more collaboration after understanding the purpose of the activity.

Question 3: "Do you think that participants gained a sense of belonging to a group through visual art activities?"

The findings obtained from the analysis of the answers given by the participants to Question 3 are presented in [Table 4](#).

**Table 4.** Findings related to gaining a sense of belonging to a group.

Theme	Code	Frequency
Gaining a sense of belonging to a group	Yes, I do.	20
	I definitely think so.	3
	Their sense of belonging developed because they willingly participated in the activities.	2
	Since a nice environment was created with the group activity, their sense of belonging developed.	2
	Activity instilled a sense of belonging to the group.	1
	They felt more valuable and communicated more.	1

All the participants reported that the activities gave individuals a sense of belonging to a group. While 11 participants answered this question as "Yes, I do." without commenting, 3 participants expressed their thoughts as "I definitely think so." 6 participants provided additional comments. Participant-10 stated that individuals' sense of belonging developed because they willingly participated in these activities. In addition, Participant-15 pointed out that individuals communicated more with their friends and felt more valuable. Furthermore, Participant-16 and Participant-14 reported that individuals gained a sense of belonging to the group and that they were satisfied with the activities.

Question 4: "Do you think that individuals adapt to social rules and the environment?"

The findings obtained from the analysis of the answers given by the participants to Question 4 are presented in [Table 5](#).

**Table 5.** Findings related to compliance with social rules and environment.

Theme	Code	Frequency
Compliance with social rules and environment	Yes, I do.	20
	They complied with the rules, they were respectful.	1
	Individuals socialized	1
	It was very useful	2
	There was peer communication	2
	They complied with all the rules, including the pandemic rules	1

All the participants stated that individuals adapted to social rules and the environment. While 13 participants answered this question as "Yes, I think" without commenting, 7 participants added explanations to their answers. In these explanations, it was stated that group activities were very useful, and there was peer communication. Participant-10 stated that individuals were respectful and complied with the rules during the activities. Next, Participant-14 pointed out that the activities contributed to the socialization of individuals and that his/her purpose in school is the integration of individuals with society. In addition, Participant-18 emphasized that the events were held on the peak days of the COVID-19 pandemic, everyone used masks and followed other rules. Participants also followed these rules without exception, and in addition, they also complied with the rules of cleanliness and order.

Question 5: "Do you think that individuals' self-confidence has increased?"

The findings obtained from the analysis of the answers given by the participants to Question 5 are presented in [Table 6](#).



**Table 6.** Findings related to individuals' self-confidence.

Theme	Code	Frequency
Their self-confidence	Yes, individuals' self-confidence has increased	20
	Their confidence increased definitely/very much.	3
	Their confidence grew as they succeeded.	2
	Their self-confidence increased.	2
	They got help from each other and their self-confidence increased.	2
	Confidence of individuals increased due to the activity and motivation of the teacher.	1

All of the participants stated that there was an increase in the confidence of individuals. While 6 participants answered this question as "Yes, I think" without commenting, 3 participants answered, "I definitely think" and 1 participant answered "Yes, partially." 10 participants added explanations to their answers. Participant-3 and Participant-4 reported that individuals had an increase in their self-confidence as they succeeded, Participant-8 and Participant-10 stated that individuals got help from each other more frequently and comfortably, and they observed the increase in self-confidence in their classes. In addition, Participant-5 and Participant-17 pointed out that hanging their artwork on the board and applauding each other increased their self-confidence.

### 3.2. Teachers' Views on the Effects of Visual Art Activities on Stress Management of Individuals with Special Needs

In order to measure the effects of applied visual art activities on individuals' stress management, participants were asked 10 questions. The findings obtained from the analysis of the answers to these questions are presented below.

Question 6: "What was the individual's level of mastery of the task during the activity?"

The findings obtained from the analysis of the answers given by the participants to Question 6 are presented in [Table 7](#).

**Table 7.** Findings related to the individual's level of mastery of the task during the activity.

Theme	Code	Frequency
Levels of mastery of their duties	Their mastery of the task was adequate.	20
	Activities were appropriate for their level.	5
	Mastery levels were sufficient with teacher support	4
	They helped each other when needed.	2
	They were resolved to complete the task.	1
	Their level of mastery was surprisingly high.	1

All the participants answered this question by giving positive answers about the individuals' level of mastery of the task. 17 of the participants evaluated the level of individuals as "adequate" or "definitely sufficient," while 4 participants mentioned the effect of teacher support on their high level of mastery. For example, Participant-4 stated that it was sufficient under the guidance of the practicing teacher. In addition, 5 participants reported that they achieved mastery because the tasks were designed according to the ability of the individuals. Furthermore, Participant-14 also pointed out that individuals did the best they could with the support of their teachers.

Question 7: “Did you observe an individual with special needs who felt under pressure during the activity?”

The findings obtained from the analysis of the answers given by the participants to Question 7 are presented in [Table 8](#).

**Table 8.** Findings related to conditions of feeling under pressure.

Theme	Code	Frequency
Conditions of feeling under pressure	No, I did not.	20
	They came to the class voluntarily and left the class whenever they wanted.	2
	They looked happy.	2
	Appropriate activities were given to individuals	1
	Teacher communication was very good	1

Participants were asked whether they observed any individuals feeling under pressure during the activity. None of the participants answered this question affirmatively. While 14 participants briefly answered as “no” or “I did not,” the six participants gave more detail. Participant-3 and Participant-10 reported that no individual felt under pressure since individuals were in the class on a voluntary basis and could leave whenever they wanted with permission. In addition, Participant-8 and Participant-14 reported that individuals participated in the activities with pleasure and seemed happy during the activities.

Question 8: “Is there an increase or decrease in attention and interest during the activity?”

The findings obtained from the analysis of the answers given by the participants to Question 8 are presented in [Table 9](#).

**Table 9.** Findings related to experiencing an increase/decrease in attention and interest, and their control.

Theme	Code	Frequency
Experiencing an increase / decrease in attention and interest and their control	There was increased attention and interest	7
	There was increased attention and interest because they liked the lesson and the activity	4
	Some individuals with special needs occasionally experienced low interest and attention.	13
	Distraction was observed in one individual with a physical disability and one special needs individual with autism	2
	Interest occasionally decreased but recovered due to timely and appropriate intervention.	7

Out of 18 participants, 7 of them stated that the attention and interest of individuals with special needs increased. These participants reported that individuals with special needs liked the relevant lesson and that they had a high level of attention and interest because they came to the lesson willingly. 13 participants emphasized that some of the individuals experienced low interest and attention from time to time. They also stated that it was normal for these individuals to lose their interest and attention in a short time due to their conditions. For example, Participant-3 stated that an individual with special needs experienced a lack of attention and interest due to their physical problems, and Participant-9 stated that an individual with autism sometimes lacked attention and interest. However, the 13 participants reported that even if there was a decrease in attention and interest in individuals with special needs, the teacher's timely

intervention helped them recover their attention and interest. In addition, Participant-15 stated that sometimes there was distraction, but by attracting attention again with more appropriate activities, the individual's progress in this matter was ensured. Next, Participant-19 also stated that whenever there was a decrease in interest and attention, the teacher integrated the individual into the lesson with different methods, which helped them increase their level of interest.

Question 9: “Did you observe that the visual art activity instigated negative thoughts such as being bored and wanting to finish as soon as possible in individuals with special needs?”

The findings obtained from the analysis of the answers given by the participants to Question 9 are presented in [Table 10](#).

**Table 10.** Findings related to negative thoughts such as being bored and wanting to finish the task as soon as possible.

Theme	Code	Frequency
Negative Thoughts	No, I did not.	20
	Individuals with special needs did the activities willingly and with pleasure.	4
	Individuals with special needs did not want the event to end.	6
	There was no boredom.	1

All the participants stated that none of the individuals with special needs expressed negative thoughts about the course such as finding it boring and long, or a desire to finish it as soon as possible. While 9 participants answered the question briefly as "No, I did not," 11 participants gave their answers by adding additional comments. For example, Participant-11, 12, 13 and 16 reported that, far from being bored, individuals with special needs expressed their desire to do more. Next, Participant-5, 8 and 18 pointed out that individuals with special needs did activities willingly, happily and with pleasure.

Question 10: “Did you observe that the visual art activity instigated a sense of failure in individuals with special needs during the activity?”

The findings obtained from the analysis of the answers given by the participants to Question 10 are presented in [Table 11](#).

**Table 11.** Findings related to a sense of failure.

Theme	Code	Frequency
Sense of failure	No, I did not.	20
	No, I definitely did not.	3
	I observed a sense of achievement.	4
	The activities were appropriate to the level of the individuals.	1

All the participants stated that they did not observe a sense of failure among individuals with special needs during the activities. While 11 participants answered the question briefly as "No, I did not," 9 participants gave their answers by adding additional comments. For example, Participant-5, 13 and 16 stated that they certainly did not observe a sense of failure among individuals with special needs during the activity, on the contrary, they observed a sense of achievement and increased self-confidence. Participant-10 and 14 pointed out that the individuals with special needs performed the tasks very successfully. Finally, Participant-3 emphasized that a person with special needs, who had physical difficulties in holding scissors,

had some difficulties in terms of hand coordination at first, but then she also experienced a sense of achievement.

Question 11: “Do you think the individuals with special needs experienced fear, anxiety or restlessness during the activities?”

The findings obtained from the analysis of the answers given by the participants to Question 11 are presented in [Table 12](#).

**Table 12.** Findings related to experiencing fear, anxiety or restlessness.

Theme	Code	Frequency
Experiencing fear, anxiety, or restlessness	No, I do not think so.	20
	Individuals with special needs were happy during the lesson and enjoyed the activities.	2
	The encouragement of the teacher prevented these feelings.	1
	The free and peaceful atmosphere in the classroom prevented these feelings	1

All the participants stated that they did not observe fear, anxiety or restlessness among individuals with special needs during the activities. While 15 participants answered the question briefly as "No, I do not think so," 4 participants made additional comments. Participant-17 stated that individuals with special needs did not experience fear, anxiety and restlessness because they enjoyed activities. Next, Participant-10 emphasized that individuals with special needs did not experience fear, anxiety and restlessness because the teacher comforted them by encouraging them when necessary and by preparing a suitable environment for them. In addition, Participant-16 stated that individuals with special needs did not feel fear, anxiety and restlessness, on the contrary, they felt confident in a free and peaceful environment.

Question 12: “Did you observe that the individual with special needs felt inadequate in making decisions during the activity?”

The findings obtained from the analysis of the answers given by the participants to Question 12 are presented in [Table 13](#).

**Table 13.** Findings related to feeling inadequate in making decisions.

Theme	Code	Frequency
Feeling inadequate in making decisions	No, I did not.	11
	Yes, I observed in some.	9
	The teacher timely intervened when individuals with special needs felt inadequate.	3
	Individuals with special needs, who felt inadequate, learned by asking, and continued the activity	2
	Some experienced difficulties.	1

The Participants were asked whether they observed that individuals with special needs felt inadequate in making decisions during the activities. 11 participants stated that they did not observe that individuals with special needs felt inadequate in making decisions during the activity. On the other hand, 9 participants stated that they observed that some individuals with special needs felt inadequate in decision-making, but the teacher helped them by intervening in such situations in a timely manner. In addition, it was emphasized that individuals with special needs, who felt inadequate in making decisions, improved themselves. Furthermore,

Participant-8 stated that individuals with special needs sometimes had difficulties in doing activities, but they learned by asking their friends and teachers, they did not break away from the activity and they continued to do it.

Question 13: “Have you observed that individuals with special needs showing concerns about not being accepted by their peers?”

The findings obtained from the analysis of the answers given by the participants to Question 13 are presented in [Table 14](#).

**Table 14.** Findings related to showing concerns about not being accepted by their peers.

Theme	Code	Frequency
	No, I have not.	20
Worry about not being accepted by peers	Peer communications were on point.	1
	They showed no behavior to indicate such concerns.	1
	They were in tune with their friends.	1
	The teacher created a peaceful and accepting environment.	1

All of the participants stated that they did not observe individuals showing concern that they would not be accepted by their peers. 16 participants answered the question briefly as “No, I have not,” while 4 participants made additional comments. Participant-3 emphasized that individuals with special needs did not express any worries about being accepted by their peers, and that peer communication was sufficient and at a high level. In addition, Participant-10 stated that individuals with special needs continued to work in harmony with their friends.

Question 14: “Did you observe emotional instability (constant anxiety, excessive excitement, unwarranted rush, sense of inadequacy, laughing/crying for no reason, etc.) during the activity? If so, what were they?”

The findings obtained from the analysis of the answers given by the participants to Question 14 are presented in [Table 15](#).

**Table 15.** Findings related to emotional instability during the activities.

Theme	Code	Frequency
	No, I did not.	17
Emotional instability	The teacher comforted individuals before the activity.	1
	Problematic behaviors were observed in some individuals with special needs.	3
	The teacher intervened on a few occasions in a timely manner.	1
	Excessive excitement states such as laughing were observed in some individuals with special needs.	1

When the participants were asked whether they observed emotional instability (constant anxiety, excessive excitement, unwarranted rush, sense of inadequacy, laughing/crying for no reason, etc.) during the activity among individuals with special needs, 17 participants stated that they did not, while 3 participants stated that they observed among some individuals with special needs. For example, Participant-5 stated that some individuals with special needs showed excessive excitement behaviors such as laughing. Participant-19, on the other hand, emphasized that sometimes there were situations that can be described as emotional instability, but the teacher included the individuals in the lesson by intervening in a timely manner. Of the 17 participants who stated that they did not observe emotional instability (constant anxiety,

excessive excitement, unwarranted rush, sense of inadequacy, laughing/crying for no reason, etc.) among individuals with special needs during the activity, only Participant-16 added additional comments to their response.

Question 15: “Have you observed problematic behaviors (excessive daydreaming, ambiguity and disconnection in conversations, indifference to activities, negative interactions, changes/cancellations in routines, harming oneself and others, shyness, tantrums, throwing objects) in individuals with special needs during the study?”

The findings obtained from the analysis of the answers given by the participants to Question 15 are presented in [Table 16](#).

**Table 16.** *Findings related to problematic behaviors.*

Theme	Code	Frequency
Problematic behaviors	No, I did not.	18
	No, because it was a popular, interesting course.	1
	They showed no behavior to indicate such concerns	1
	Problematic behaviors were observed in some individuals with special needs	2
	The teacher intervened in a timely manner	1

Participants were asked whether they observed problematic behaviors (excessive daydreaming, ambiguity and disconnection in conversations, indifference to activity, negative interactions, changes/cancellations in routines, self-harming, shyness, tantrums, throwing objects during work, etc.) among individuals with special needs during the activity. While 18 participants answered this question by stating that they did not, only two participants (Participant-5 and Participant-19) stated that they did, albeit partially. Out of 18 participants 14 of them, who stated that they did not observe problematic behaviors among individuals with special needs, briefly replied as "No, I did not." The other four participants also made some comments on the subject. For example, Participant-10 stated that there were no problems because the activities were carried out with the support of special education teachers. Participant-15, on the other hand, emphasized that individuals with special needs completed their activities very well and without any problems. In addition, Participant-18 stated that the individual felt happier and that their previous negative behaviors had disappeared. As for the opinions of two participants who stated that they observed some problematic behaviors among individuals with special needs, Participant-5 stated that they did not witness a behavior such as throwing objects, but there was occasional disconnection, and these were fixed with the intervention of the teacher.

#### **4. DISCUSSION and CONCLUSION**

Based on the findings obtained from the research, it can be concluded that visual arts activities have a positive impact on the socialization of individuals with special needs. They are enthusiastic about participating in these activities and collaborate effectively during the activity which results in a sense of belonging. Additionally, they comply with social norms, adapt well to their environment, and are proficient in communicating with peers.

The research also revealed many positive behaviors, such as mutual respect, approval, and motivation among individuals with special needs, while no negative behavior was observed. Interestingly, individuals with special needs who often exhibit behavior problems did not display these issues during visual arts activities. Moreover, it was observed that providing an appropriate environment for expressing themselves through visual arts activities made them happy, engaged, and more sociable.

Individuals who were willing to participate in visual arts activities collaborated with their peers and teachers. Similarly, Salderay (2008), Mayer (1999), and Polloway and Patton (1997) stated in their research that individuals with special needs had difficulty integrating into society due to limitations and environmental factors and that these difficulties could be overcome through visual arts education.

It was observed that individuals with special needs who had the opportunity to express themselves through art activities socialized with each other when a suitable space was created. No aggressive behaviors were observed among individuals with special needs during visual art activities. It was observed that individuals with special needs who had difficulty expressing their feelings and thoughts, and therefore, had communication difficulties, overcame this situation during the activities. Many positive behaviors such as respecting, approving and motivating each other were observed. As a result of the opportunity to express themselves comfortably during the implementation, they found the activity enjoyable. It was concluded that individuals with special needs were eager to participate in the activities, cooperated with their peers and the teacher during the activities, developed a sense of belonging because they participated in these activities willingly, and that these individuals were effective in the realization of their adaptation to social rules and the environment, and in peer communication. At the end of the activity, teachers and individuals with special needs reported that they would like to repeat similar activities in the same area for a long time. Hetland et al. (2015) have noted that individuals whose talents are revealed through visual arts activities are likely to have a positive impact on their socialization process when their sense of achievement and self-confidence increase. Salderay (2014) has also highlighted in her research that visual arts boost self-confidence and enhance social and independent living skills in individuals.

According to Kavale et al. (1988), Rooney (2004), Keirstead and Graham (2004), Salderay (2008), and Doğutaş (2017), visual art activities allow individuals with special needs to interact with other learning areas, integrate easily with other disciplines, learn through play and fun, and engage in peer communication and cooperation. These studies share similar characteristics with the present research findings. Furthermore, the current study supports the benefits of visual art activities, including learning through play and fun, peer communication and cooperation. Many skills can be acquired through visual arts education for individuals with special needs (Grytting, 2000; Adan, 2009; Bolu, 2010; Kaynak, 1995; Işık, 2014; Paksoy, 2003). Those who develop the ability to express themselves can also enhance their motivation, conflict resolution, problem-solving, and decision-making skills (Gündoğdu & Adıgüzel, 2016). As a result of their experiences with visual art activities, it can be concluded that individuals with special needs have improved critical thinking, problem-solving, communication, and ability to cope with difficulties.

Encouraging communication and socialization among individuals with special needs has been found to increase their self-sufficiency and ability to cope with stress. Visual art activities promote emotional, mental, and social integration, and individuals have shown success in areas such as task mastery, attention and interest, sense of accomplishment, and emotional balance. Participating teachers' statements corroborated individuals' happiness in these activities, and they have not encountered them experiencing stress-inducing feelings of inadequacy or failure. Visual art activities direct individuals with special needs towards creation and production, increasing their self-sufficiency and competence. These activities have also been observed to help individuals who struggle with expressing their emotions and thoughts, overcoming communication barriers, and distancing themselves from aggressive behavior. Individuals who can express themselves have expressed a desire to repeat similar activities.

By engaging in visual art activities, individuals who acquire the ability to express themselves can use their creations as a means of communication with their environment. Simple art

interventions can foster positive experiences by promoting active creativity (Martin et al., 2018). Salderay (2010) points out that visual arts are employed for therapeutic purposes and possess the power to heal individuals with special needs and patients by enhancing self-awareness and providing mental relaxation. Martin et al. (2018) mention that art activities promote socialization and active creation, leading to positive experiences. According to Salderay (2010), where visual arts are used for therapeutic purposes; they have healing power over individuals and patients with special needs, providing progress in self-perception and spiritual relaxation. Martin et al. (2018) mention that activities create positive experiences through socializing and active creation. Creative art therapies and art activities can also significantly reduce stress in participants. Scott (2017) has found that being involved in an artistic activity can reduce clinical and non-clinical stress levels.

Individuals with special needs showed increased attention and interest during the visual art activity, and no instances of failure, fear, anxiety, or restlessness were observed. It can be concluded that visual art activities have a positive impact on the behavior of individuals with special needs, improving their psychomotor skills, and reducing their levels of stress and anxiety.

Individuals with special needs did not exhibit anxiety regarding acceptance by their peers during activities, emotional instability (such as constant anxiety, excessive excitement, feeling of inadequacy, laughing or crying for no reason), or problematic behaviors (such as excessive daydreaming, uncertainty or disconnection in speech, indifference to the activity, negative interactions, changes or cancellations in routines, self-harm or harming others, shyness, tantrums, or throwing objects during work). According to Erbay (1995), it is possible to slow down the behavior of individuals who exhibit problematic behaviors through art education. Several studies, including Grytting (2000), Riccio, Rollins, and Morton (2003), Keirstead and Graham (2004), Rooney (2004), and Bayraktar (2007), have reported positive outcomes in socialization, communication, anxiety reduction, and vocational education for individuals with special needs through visual arts education. These findings suggest that individuals with special needs can feel safe and happy in society by providing visual art activities that match their level of interest and ability.

#### **4.1. Recommendations**

Based on the research findings, several recommendations have been proposed for policymakers, educators, researchers, and families. These recommendations have been categorized into two groups: those for education practice and those for future research.

##### **4.1.1. Recommendations for education**

1. In order to support individuals with special needs, training programs should be developed for parents and teachers in various visual art activities.
2. Teachers and families should facilitate experiential activities for individuals with special needs. They should be able to provide suitable materials based on their interests and offer feedback to promote their performance.
3. Awareness-raising campaigns should be organized to highlight the significance of visual arts in the development of individuals with special needs.
4. Special education teachers should receive training to develop a deeper interest in visual arts and institutions should employ field specialists to conduct visual arts workshops.
5. The curriculum in special education practice schools should be expanded by increasing course hours for visual arts.
6. The creation of an art space outside the workshop would enable individuals with special needs to continue their creative endeavors after class hours, contributing to their socialization and self-development.



#### 4.1.2. Recommendations for future research

1. Within the scope of art education, it is possible to apply the current research to individuals with special needs studying at different grade levels, and similar studies can be conducted with individuals with special needs for different branches.
2. Studies that enable individuals with special needs and individuals with normal development to socialize with each other should be carried out.
3. Visual arts education should be emphasized in the process of accepting children from families with individuals with special needs.
4. It is important to compare domestic and foreign visual arts programs and to conduct studies that will enable individuals to focus on their areas of interest.

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The authors declare no conflict of interest. This research study complies with research publishing ethics. The scientific and legal responsibility for manuscripts published in IJATE belongs to the authors. **Ethics Committee Number:** Trabzon University, Social and Human Sciences Research and Publication Ethics Committee, E-81614018-000-320.

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The authors contributed equally to all the stages of the study.

#### Orcid

Kıymet BAYER  <https://orcid.org/0000-0003-1817-2022>

Seda LİMAN TURAN  <https://orcid.org/0000-0001-6920-6558>

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